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Substitute for form 1448/PTO

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Complete if Known

Application Number	10/727.083
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Filing Date	12/02/2003
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First Named Inventor	Laibin Luo et al
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Art Unit	1714 1711
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Examiner Name

Attorney Docket Number	2267.006
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Sheet	1	of	5
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U. S. PATENT DOCUMENTS

Examiner Signature	/Olga Asinovsky/ (06/30/2006)	Date Considered	06/30/2006
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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/727,083
Filing Date	12/02/2003
First Named Inventor	Laibin Luo et al
Art Unit	4714 /7//
Examiner Name	
Attorney Docket Number	2267.006

Sheet	2	of	5
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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
OA		H. BURT et al, "Development of copolymers of poly(D,L-lactide) and methoxypolyethylene glycol as micellar carriers of paclitaxel", Colloids and Surfaces B: Biointerfaces, 16:161-171 (1999)	
OA		P. ALEXANDRIDIS, "Poly(ethylene oxide)/poly(propylene oxide) block copolymer surfactants", Current Opinion in Colloid & Interface Science, 2:478-489 (1997)	
OA		P. LIM SOO et al, "Incorporation and release of hydrophobic probes in biocompatible polycaprolactone-block-poly(ethylene oxide) micelles: implications for drug delivery", Langmuir, 18:9996-10004 (2002)	
OA		Y. KAKIZAWA et al, "Block copolymer self-assembly into monodisperse nanoparticles with hybrid core of antisense DNA and calcium phosphate", Langmuir, 18(12):4539-4543 (June, 2002)	
OA		N. NISHIYAMA et al, "Preparation and characterization of self-assembled polymer-metal complex micelle from cis-dichlorodiammineplatinum (II) and poly(ethylene glycol)-poly(alpha, beta-aspartic acid) block copolymer in an aqueous medium", Langmuir, 15:377-383 (1999)	
OA		R. GREF et al, "Biodegradable long-circulating polymeric nanospheres", Science, 263:1600-1603 (March, 1994)	
OA		L. LUO et al, "Cellular internalization of poly(ethylene oxide)-b-poly(e-caprolactone) diblock copolymer micelles", Bioconjugate Chem., 13:1259-1265 (2002)	
OA		S. KATAYOSE et al, "Water-soluble polyion complex associates of DNA and poly(ethylene glycol)-poly(L-lysine) block copolymer", Bioconjugate chem., 8:702-707 (1997)	
OA		N. RAPOPORT et al, "Intracellular uptake and trafficking of pluronic micelles in drug-sensitive and MDR cells: effect on the intracellular drug localization", Journal of Pharmaceutical Sciences, 91(1):157-170 (January, 2002)	
OA		H. SANG YOO et al, "Biodegradable polymeric micelles composed of doxorubicin conjugated PLGA-PEG block copolymer", Journal of Controlled Release, 70:63-70 (2001)	

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		Application Number	10/727,083		
		Filing Date	12/02/2003		
		First Named Inventor	Laibin Luo et al		
		Art Unit	4714 / 771		
		Examiner Name			
Sheet	3	of	5	Attorney Docket Number	2267.006

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
OA		M-C. JONES et al, "Polymeric micelles - a new generation of colloidal drug carriers", European Journal of Pharmaceutics and Biopharmaceutics, 48:101-111 (1999)	
OA		M. YOKOYAMA et al, "Toxicity and antitumor activity against solid tumors of micelle-forming polymeric anticancer drug and its extremely long circulation in blood", Cancer Research, 51:3229-3236 (June, 1991)	
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OA		R. LIGGINS et al, "Polyether-polyester diblock copolymers for the preparation of paclitaxel loaded polymeric micelle formulations", Advanced Drug Delivery Reviews, 54:191-202 (2002)	
OA		Y. YAMAMOTO et al, "Temperature-related change in the properties relevant to drug delivery of poly(ethylene glycol)-poly(D,L-lactide) block copolymer micelles in aqueous milieu", Journal of Controlled Release, 82:359-371 (2002)	
OA		A. SANNER et al, "Chemistry, structure and properties of polyvinylpyrrolidone", in Proceeding of the International Symposium on Povidone, University of Kentucky, Lexington, KY pp. 20-38 (1983)	
OA		E. RANUCCI et al, "New ester and lactone end-functionalized N-vinyl-2-pyrrolidinone oligomers", Macromol. Chem. Phys., 201:1219-1225 (2000)	
OA		E. RANUCCI et al, "Synthesis and molecular weight characterization of end-functionalized N-vinyl-2-pyrrolidinone oligomers", Macromol. Chem. Phys., 196:763-774 (1995)	
OA		Z. LIU et al, "Studies on the free radical polymerization of N-vinylpyrrolidinone in 3-methylbutan-2-one", Macromolecules, 35:1200-1207 (2002)	
OA		G. DOEBBLER, "Cryoprotective compounds", Cryobiology, 3(1):2-11 (1966)	

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		Filing Date	12/02/2003		
		First Named Inventor	Laibin Luo et al		
		Art Unit	1714 17//		
		Examiner Name			
Sheet	4	of	5	Attorney Docket Number	2267.006

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OA		F. HAAF et al, "Polymers of N-vinylpyrrolidone: synthesis, characterization and uses", Polymer Journal, 17 (1):143-152 (1985)	
OA		A. BENAHEMED et al, "Novel polymeric micelles based on the amphiphilic diblock copolymer poly(N-vinyl-2-pyrrolidone)-block-poly(D,L-lactide)", Pharmaceutical Research, 18(3):323-328 (2001)	
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OA		M. TOWNSEND et al, "Use of lyoprotectants in the freeze-drying of a model protein, Ribonuclease A", Journal of Parenteral Science & Technology, 42(6):190-199 (November-December, 1988)	
OA		Y. YAMAMOTO et al, "Long-circulating poly(ethylene glycol)-poly(D,L-lactide) block copolymer micelles with modulated surface charge", Journal of Controlled Release, 77:27-38 (2001)	
OA		M. YOKOYAMA et al, "Characterization of physical entrapment and chemical conjugation of adriamycin in polymeric micelles and their design for in vivo delivery to a solid tumor", Journal of Controlled Release, 50:79-92 (1998)	
OA		G. KWON et al, "Enhanced tumor accumulation and prolonged circulation times of micelle-forming poly(ethylene oxide-aspartate) block copolymer-adriamycin conjugates", Journal of Controlled Release, 29:17-23 (1994)	
OA		K. KATAOKA et al, "Block copolymer micelles for drug delivery: design, characterization and biological significance", Advanced Drug Delivery Reviews, 47:113-131 (2001)	
OA		A. GABIZON et al, "Long-circulating liposomes for drug delivery in cancer therapy: a review of biodistribution studies in tumor-bearing animals", Advanced Drug Delivery Reviews, 24:337-344 (1997)	
OA		K. MATYJASZEWSKI et al, "Hydrogels by atom transfer radical polymerization. I. Poly(N-vinylpyrrolidone-g-styrene) via the macromonomer method", Journal of Polymer Science Part A: Polymer Chemistry, 36:823-830 (1998)	

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STATEMENT BY APPLICANT**

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Sheet	5	of	5	Application Number	10/727,083
				Filing Date	12/02/2003
				First Named Inventor	Laibin Luo et al
				Art Unit	4744 / 7//
				Examiner Name	
				Attorney Docket Number	2267.006

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
OA		K. MATYJASZEWSKI, "Mechanistic aspects of atom transfer radical polymerization", Am. Chem. Soc. Symp. Ser., 685:258-283 (1998)	
OA		A. KABANOV et al, "Pluronic block copolymers for overcoming drug resistance in cancer", Advanced Drug Delivery Reviews, 54:759-779 (2002)	
OA		M. YOKOYAMA et al, "Characterization and anticancer activity of the micelle-forming polymeric anticancer drug adriamycin-conjugated poly(ethylene glycol)-poly(aspartic acid) block copolymer", Cancer Research, 50:1693-1700 (March, 1990)	
OA		J. EGUIBURU et al, "Graft copolymers for biomedical applications prepared by free radical polymerization of poly(L-lactide) macromonomers with vinyl and acrylic monomers", Polymer, 37(16):3615-3622 (1996)	

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		Application Number	10/727,083		
		Filing Date	December 2, 2003		
		First Named Inventor	Luo et al.		
		Art Unit	1711		
		Examiner Name			
Sheet	2	of	2	Attorney Docket Number	2267.006

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
OA		T.W. CHUNG, "Novel Micelle-Forming Block Copolymer Composed of Poly(E-Caprolactone) and Poly(vinyl pyrrolidone)", Polymer 2004, 45(5), 1591-1597, ISSN: 0032-3861.	
OA		L. LUO, "Novel Amphiphilic Diblock Copolymer of Low Molecular Weight Poly(N-vinylpyrrolidone)-block poly(D,L-Lactide): Synthesis, Characterization, and Micellization", Macromolecules 2004, 37(11), 4008-4013, ISSN: 0024-9297.	
OA		K.M. STRIDBERG, "Controlled Ring-Opening Polymerization: Polymers with Designed Macromolecular Architecture", Advances in Polymer Science, Vol. 157, 42-65, Springer-Verlag Berlin Heidelberg 2002.	
OA		V.P. TORCHILIN, "Amphiphilic Poly-N-vinylpyrrolidones: Synthesis, Properties and Liposome Surface Modification", Biomaterials 2001, 22, 3035-3044.	

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